

**REMARKS**

Upon entry of the instant Amendment, claims 14-20 and 31-44 will be pending in the application. Claims 14, 33 and 42 are amended and claim 44 is added. Support for the amendment to claims 14, 33 and 42 and new claim 44 can be found in paragraphs [0019], [0024] and [0025] of the instant published application 2006/0071304.

Reconsideration of the rejected claims in view of the following remarks is respectfully requested.

***Present Amendment is proper for entry***

Applicants respectfully submit that the instant amendment is proper for entry after final rejection. Applicants note that no question of new matter is presented nor are any new issues raised in entering the instant amendment of the claims and that no new search would be required. Moreover, Applicants submit that the instant amendment places the application in condition for allowance, or at least in better form for appeal. Accordingly, Applicants request the Examiner to enter the instant amendment, consider the merits of the same, and indicate the allowability of the present application and each of the pending claims. Applicants note, in particular, that claims 14, 33 and 42 have been amended, and claim 44 has been added, to recite certain features which are believed to define over the applied documents of record. Furthermore, the Examiner is citing CHEN for the first time in a final rejection, and Applicants have not had a previous opportunity to amend the claims in an effort to even more clearly distinguish the invention over this reference.

**35 U.S.C. § 102(e) Rejection**

Claims 14-17, 31-33, 36 and 40-43 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Published Patent Application No. 2003/0197226 to CHEN et al.

The Examiner asserted that this document discloses or suggests all the features recited in these claims including the recited substrate contact. Applicants respectfully traverse this rejection.

Notwithstanding the Office Action assertions as to what CHEN discloses, Applicants submit that CHEN fails to disclose, or even suggest, for example, that the substrate contact is arranged adjacent to a side of the source without an intervening shallow trench isolation structure (claim 14) and/or that the substrate contact or ring substrate contact abuts a side of the source or is arranged adjacent to a side of the source without an intervening shallow trench isolation structure (claims 33 and 42).

Applicants do not dispute that CHEN apparently discloses a substrate contact 214 which is arguably in electrical contact (via the doped well 202) with the source 208 (see Fig. 3B). However, Fig. 3B of CHEN specifically utilizes a shallow trench isolation layer 212 arranged adjacent to a side of the source 208 and between the source 208 and the so-called substrate contact 214. Thus, CHEN clearly cannot be read to disclose or suggest that the substrate contact or ring substrate contact abuts a side of the source or is arranged adjacent to a side of the source without an intervening shallow trench isolation structure (claims 14, 33 and 42).

Thus, Applicants submit that the above-noted claims are not disclosed, or even suggested, by any proper reading of CHEN.

Moreover, Applicants submit that dependent claims 17, 31, 32, 36, 40, 41 and 43 are allowable at least for the reason that these claims depend from allowable base claims and because these claims recite additional features that further define the present invention. In particular, Applicants submit that no proper reading of CHEN discloses or even suggests, in combination, the features recited in claims 17, 31, 32, 36, 40, 41 and 43 in combination with the features recited in claims 14, 33 and 42.

Applicants request that the Examiner reconsider and withdraw the rejection of the above-noted claims under 35 U.S.C. § 102(e).

### ***35 U.S.C. § 103(a) Rejections***

#### **Over Chen alone**

Claims 15 and 34 were rejected under 35 U.S.C. § 103(a) as being unpatentable over CHEN alone.

The Examiner asserted that this document discloses or suggests all the features recited in these claims. Applicants respectfully traverse this rejection.

Notwithstanding the Office Action assertions as to what CHEN discloses, Applicants submit that CHEN fails to disclose, or even suggest, for example, that the substrate contact is arranged adjacent to a side of the source without an intervening shallow trench isolation structure (claim 14) and/or that the substrate contact or ring substrate contact abuts a side of the source or is arranged adjacent to a side of the source without an intervening shallow trench isolation structure (claim 33).

As explained above, Applicants do not dispute that CHEN apparently discloses a substrate contact 214 which is arguably in electrical contact (via the doped well 202)

with the source 208 (see Fig. 3B). However, Fig. 3B of CHEN specifically utilizes a shallow trench isolation layer 212 arranged adjacent to a side of the source 208 and between the source 208 and the so-called substrate contact 214. Thus, CHEN clearly cannot be read to disclose or suggest that the substrate contact or ring substrate contact abuts a side of the source or is arranged adjacent to a side of the source without an intervening shallow trench isolation structure (claims 14 and 33).

Thus, Applicants submit that the above-noted claims are not disclosed, or even suggested, by any proper reading of CHEN.

Moreover, Applicants submit that dependent claim 15 and 34 are allowable at least for the reason that these claims depend from allowable base claims and because these claims recite additional features that further define the present invention. In particular, Applicants submit that no proper reading of CHEN discloses or even suggests, in combination, the features recited in claims 15 and 34 in combination with the features recited in claims 14 and 33.

Applicants request that the Examiner reconsider and withdraw the rejection of the above-noted claims under 35 U.S.C. § 103(a).

Over Chen with Herzum

Claims 16, 20, 35 and 39 were rejected under 35 U.S.C. § 103(a) as unpatentable over CHEN in view of U.S. Published Patent Application No. 2004/0238871 to HERZUM.

The Examiner acknowledged that CHEN lacks, among other features, the recited features of these dependent claims. However, the Examiner asserted that such

features are disclosed in HERZUM, and that it would have been obvious to one of ordinary skill in the art to combine the teachings of these documents. Applicants respectfully disagree with the Examiner's assertions and traverses this rejection.

Notwithstanding the Office Action assertions as to each of CHEN and HERZUM discloses or suggests, Applicants submit that neither CHEN and HERZUM discloses, or even suggests, for example, that the substrate contact or ring substrate contact abuts a side of the source or is arranged adjacent to a side of the source without an intervening shallow trench isolation structure.

As explained above, Applicants do not dispute that CHEN apparently discloses a substrate contact 214 which is arguably in electrical contact (via the doped well 202) with the source 208 (see Fig. 3B). However, Fig. 3B of CHEN specifically utilizes a shallow trench isolation layer 212 arranged adjacent to a side of the source 208 and between the source 208 and the so-called substrate contact 214. Thus, CHEN clearly cannot be read to disclose or suggest that the substrate contact or ring substrate contact abuts a side of the source or is arranged adjacent to a side of the source without an intervening shallow trench isolation structure (claims 14 and 33).

HERZUM does not the deficiencies of CHEN. Applicants do not dispute that HERZUM discloses that the substrate contact 12 is in electrical contact with the source 14 (see paragraph [0036]). However, HERZUM explains on paragraph [0036] that the current flows from the source to the contact 12. Thus, HERZUM cannot be read to disclose or suggest that little or no current flows through the substrate contact (claim 14). Furthermore, as HERZUM merely explains that so-called contact 12 is a sinker,

the Examiner has failed to explain how the disclosed sinker can be read to disclose or suggest a ring substrate contact (claim 33).

Applicants submit that there is no reason to modify CHEN and HERZUM in a manner which would render obvious Applicants' invention, and additionally, Applicants submit that there is no rationale disclosed or suggested in the prior art to modify the applied reference in the manner suggested by the Examiner. The Examiner's opinion does not provide a proper basis for these features or for the motivation to modify this document in the manner suggested by the Examiner. Therefore, Applicants submit that the invention as recited in at least independent claims 14 and 33 is not rendered obvious by any reasonable inspection and interpretation of the disclosure of the applied references.

Finally, Applicants submit that dependent claims 16, 20, 35 and 39 are allowable at least for the reason that these claims depend from allowable base claims and because these claims recite additional features that further define the present invention. In particular, Applicants submit that no proper combination of CHEN and HERZUM discloses or even suggests, in combination, the features recited in claims 16, 20, 35 and 39 in combination with the features recited in claims 14 and 33.

Applicant requests that the Examiner reconsider and withdraw the rejection of the above-noted claims under 35 U.S.C. § 103(a).

#### Over Chen with Rice

Claims 18, 19, 37 and 38 were rejected under 35 U.S.C. § 103(a) as unpatentable over CHEN in view of U.S. Patent No. 4,738,936 to RICE.

The Examiner acknowledged that CHEN lacks, among other features, the recited features of these dependent claims. However, the Examiner asserted that such features are disclosed in RICE, and that it would have been obvious to one of ordinary skill in the art to combine the teachings of these documents. Applicants respectfully disagree with the Examiner's assertions and traverses this rejection.

Notwithstanding the Office Action assertions as to each of CHEN and RICE discloses or suggests, Applicants submit that neither CHEN and RICE discloses, or even suggests, for example, that the substrate contact or ring substrate contact abuts a side of the source or is arranged adjacent to a side of the source without an intervening shallow trench isolation structure.

As explained above, Applicants do not dispute that CHEN apparently discloses a substrate contact 214 which is arguably in electrical contact (via the doped well 202) with the source 208 (see Fig. 3B). However, Fig. 3B of CHEN specifically utilizes a shallow trench isolation layer 212 arranged adjacent to a side of the source 208 and between the source 208 and the so-called substrate contact 214. Thus, CHEN clearly cannot be read to disclose or suggest that the substrate contact or ring substrate contact abuts a side of the source or is arranged adjacent to a side of the source without an intervening shallow trench isolation structure (claims 14 and 33).

RICE does not the deficiencies of CHEN. Applicants do not dispute that RICE discloses an FET with a source contact (see title). However, the Examiner has failed to identify any language in RICE which discloses or suggests that little or no current flows through the substrate contact (claim 14). Furthermore, the Examiner has failed to

explain how the disclosed source contact can be read to disclose or suggest a ring substrate contact (claim 33).

Applicants submit that there is no reason to modify CHEN and RICE in a manner which would render obvious Applicants' invention, and additionally, Applicants submit that there is no rationale disclosed or suggested in the prior art to modify the applied reference in the manner suggested by the Examiner. The Examiner's opinion does not provide a proper basis for these features or for the motivation to modify this document in the manner suggested by the Examiner. Therefore, Applicants submit that the invention as recited in at least independent claims 14 and 33 is not rendered obvious by any reasonable inspection and interpretation of the disclosure of the applied references.

Finally, Applicants submit that dependent claims 18, 19, 37 and 38 are allowable at least for the reason that these claims depend from allowable base claims and because these claims recite additional features that further define the present invention. In particular, Applicants submit that no proper combination of CHEN and RICE discloses or even suggests, in combination, the features recited in claims 18, 19, 37 and 38 in combination with the features recited in claims 14 and 33.

Applicant requests that the Examiner reconsider and withdraw the rejection of the above-noted claims under 35 U.S.C. § 103(a).

## **CONCLUSION**

In view of the foregoing amendments and remarks, Applicants submit that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to



issue. The Examiner is invited to contact the undersigned at the telephone number listed below, if needed. Applicants hereby make a written conditional petition for extension of time, if required. Please charge any deficiencies in fees and credit any overpayment of fees to Deposit Account No. 09-0458.

Respectfully submitted,  
Basant JAGANNATHAN, *et al.*

A handwritten signature in black ink, appearing to read "Andrew M. Calderon", written over a horizontal dashed line.

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